159

SEEDS

for the

NURSERYMAN AND FORESTER

1958 - 1959

F. W. SCHUMACHER

HORTICULTURIST

SANDWICH, MASS.

Telephone SAGAMORE 659

PRICE ADJUSTMENTS - - See page 28

TERMS

Deliveries are subject to yield of crops and safe arrival of consignments.

It is not possible to have all items listed available at all times. A number of perishable seeds cannot be stored successfully and must be ordered in season. All seeds are offered subject to crop failures or short supplies.

Seeds are sold without warranty, expressed or implied, as to description and productiveness. Goods should be carefully inspected upon arrival and claims for condition made at once. We cannot consider claims after seeds have been stored or planted.

All shipments travel at buyer's risk and claims for damages in transit must be taken up with carriers.

CAUTION—While it is true that plants grown from seed of horticultural varieties often yield superior plant material in comparison to that grown from nondescript seed, we wish to emphasize that seeds of such varieties or hybrids, with few exceptions, cannot be expected to come true to name. They are offered here for the convenience of competent plantsmen, for research and breeding work only.

CUSTOMERS OTHER THAN PROFESSIONALS—please note that their orders for pound lots will be handled in line with all others. Orders for small quantities of assorted items must wait their turn to be filled after arrival of respective items from sources. We suggest that such orders be placed with us prior to March 1st. During the busy spring and fall shipping seasons orders for small amounts of seeds cannot be filled promptly. Please confine correspondence concerning small orders to the most necessary and attach a stamped return envelope if your inquiry does not concern an order. The right is reserved to return orders received in excess of our facilities.

PRICES—subject to change without notice, are f.o.b. Sandwich, Mass.

PAYMENT—for customers of approved credit upon receipt of invoice. For cash remittance we will pack, and forward free of charge, parcel post shipments within the states. Customers may, at their option, deduct 3% for cash discount from seed total of order and add approximate amount of postage and packing if order amounts to \$10.00 and over. For orders or shipments less than \$5.00 in value please remit 50c extra for handling.

ORDERING—We request that written orders be a separate part of any correspondence and clearly show amount and price of each item listed. Quantities smaller than listed cannot be supplied.

ABBREVIATION—N. E. stands for New England seed, a sign of hardiness; d.b. for dried berries; d.h. for dried hips; asterisk (*) denotes new or insufficiently known plants of merit.

OR—The designation OR stands for certificates of origin obtained from individual sources and held in our files.

WE ARE IN THE MARKET FOR TREE AND SHRUB SEEDS OF ALL KINDS.

	oz.	1/4 lb. lb.
ABIES alba (pectinata) ,	02.	.90 2.50
amabilis		2.00 5.75
balsamea, Lake States		1.75 5.00
cephalonica		1,10 3.00
cilicica		1.20 3.25
concolor, California (lowiana)		1.85 5.00
concolor, Colorado		1.85 5.00
firma		1.10 3.00
fraseri		4.50 12.00
grandis		2.00 5,75
homolepis		1.50 4.25
lasiocarpa		2.20 6.00
magnifica		2.00 5.75
mariesi		1.65 4.50
nordmanniana,		1.35 3.75
pinsapo		1.10 3.00
pinsapo glauca		1.25 3.50
procera (nobilis)		2.35 6.50
sachalinensis		1.85 5.00
veitchi		1.40 4.00
ACACIA armata	1.50	4.50
baileyana	.50	1.35 3.75
cultriformis	1.00	2.70 7.50
cyanophylla	.50	.90 2.50
cyclops	.60	1.65 4.50
decurrens	.50	1.10 3.00
decurrens dealbata	.50	1.25 3.50
decurrens dealbata, fast growing cultural selection	.65	1.75 5.00
decurrens mollis (mollissima)	.50	1.20 3.25 1.10 3.00
farnesiana	.50	1.10 3.00 1.25 3.50
horrida	.50 .60	1.65 4.50
longifolia	.50	1.25 3.50
melanoxylon podalyriaefolia melanoxylon	1.75	4.50 12.00
pycnantha	.50	1.30 3.75
retinodes floribunda	.75	1.85 5.50
saligna	.45	.70 2.00
ACANTHODANAY I - I - I - I - I - I - I - I - I	•0	1.65 4.50
ACANTHOPANAX sieboldianus		1.70 4.75
spinosus		
ACER campestre		.45 1.00
ginnala		1.10 3.00
negundo		.50 1.00
palmatum, small seeded	1 00	1.65 4.50
palmatum atropurpureum	1.00	2.75 7.50 4.50 12.00
palmatum atropurpureum dissectum	1.75	.50 1.25
platanoides		.45 1.00
pseudoplatanus		.90 2.50
saccharumspicatum		1.50 4.25
spicatum		
AILANTHUS altissima (glandulosa)		1.00
AKEBIA quinata		1.25 3.50
lobata		1.50 3.75
ALBIZZIA julibrissin		.50 1.00
julibrissin rosea		1.20 3.25 1.00 2.75
lophanta		1.00 4.75

AMELANCHIER alnifolia, clean	oz. 1.40	1/4 lb. 4.00	11.00
alnifolia, d.b.		1.75	4.75
AMPELOPSIS (see also Parthenocissus) aconitifolia,			
N. E., d.b.	1.00		
brevipedunculata (heterophylla) clean		1.10	3.00
AMORPHA canescens		1.25	3.50
fruticosa		. 50	1.25
ANDROMEDA glaucophylla 1.00 pkt.			0.05
ARALIA chinensis		2.25	6.25
elata		1.75	5.00
spinosa, d.b.		1.10 1.20	3.00
ARBUTUS menziesi, d.b.	1.10	3.00	3.25
ARCTOSTAPHYLOS bicolor, d.b	1.10	2.20	6.00
drupacea, d.b.		1.85	5.50
glauca, clean	.75	2.20	6.00
glandulosa, d.b.	.75	2.75	7.50
manzanita, d.b.		1.00	3.00
pungens, d.b.		1.85	5.50
tomentosa, d.b.		1.75	5.00
uva ursi, clean	1.35	3.20	8.50
ARDISIA crenulata		1.85	5.50
japonica		2.50	7.00
ARECASTRUM romanzoffianum (Cocus plumosa)			
250 seeds 1.50 — 1,000 seeds 5.00 ARISTOLOCHIA tomentosa		1.40	4.00
ARONIA arbutifolia, d.b.		90 1.10	2.50
arbutifolia brilliantissima, d.bmelanocarpa, clean	2.50	7.00	3.00
melanocarpa, cieanmelanocarpa, d.b.	2.50	.65	1.75
ASIMINA triloba		.90	2.50
AZALEA alabamensis 1.00 1/32 oz., 3.00 1/8 oz.			
albrechti			
arborescens, N. E 1.00 1/16 oz., $3.00\frac{1}{4}$ oz.			
atlantica			
austrina			
pakeri 1.90 1/32 0z., 3.00 ½ 0z.			
calendulacea			~
furbishi			-
indica (macrantha)			
japonica (hardy mollis) from specialist's			
collection			
japonica, yellow flowered, domestic			
seed 1.00 1/32 oz., 3.00 1/8 oz.			
kaempferi (see under obtusa)			
maxwelli, N. E 1.00 pkt.			
mollis (true mollis) 1.25 1/16 oz., 3.00 1/4 oz.			
mucronata (ledifolia alba) white, N. E1.00 pkt.			
mucronata amethystina 1.00 pkt.			
mucronulata, handpollinated domestic seed,			
1.25 pkt., 2.00 1/16 oz., 6.00 1/4 oz.			
nudiflora			
obtusa kaempferi, home grown, N. E.			
1.00 1/16 oz., 3.50 1/4 oz.			

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AZALEA (continued)	oz.	1/4 lb	. Ib.
obtusa kaempferi, tall red flowered			
selection 1.00 pkt., 1.50 1/32 oz.			
obtusa kaempferi, low spreading type, red			
flowers 1.00 pkt., 1.50 1/32 oz.			
pennsylvanica			
pontica			
*poukhanensis, N. E 1.25 1/32 oz., 3.00 1/8 oz.			
prunifolia			
rosea 1.00 1/16 oz., 3.00 1/4 oz.			
schlippenbachi, Korean strain, N. E.			
1.00 1/16 oz., 2.00 ½ oz. serrulata 1.00 1/32 oz., 3.00 ½ oz.			
speciosa			
vaseyi			
viscosa			
(See listing of Hybrid varieties on pages 21 and 22)			
BAUHINIA purpurea		1.75	5.00
purpurea alba		2.20	6.00
BERBERIS juliana nana, d.b 1.00 1/4 oz. 3.50			0.00
thunbergi clean		1.75	4.75
thunbergi atropurpurea, clean	2.00		15.00
BETULA japonica		1.25	3.50
lenta, clean	1.00	2.75	7.50
lutea, clean	1.25	3.50	10.00
papyrifera, clean, N. E.		4.50	12.00
papyrifera minor, N. E.	1.50	4.25	
pendula (alba)		.50	1.25
pendula (alba), clean		.90	2.50
pendula (alba), seed from northern limit, clean		1.10	3.00
populifolia, clean	.85	2.35	6.50
BROUSSONETIA papyrifera	1.00	2.75	7.50
BUDDLEIA davidi (variabilis)	0.00	1.50	4.25
davidi, from new garden forms	2.00		
davidi, white	2.00	1.00	2.05
BUTIA capitata (Cocos australis)	2.00	1.20	3.25
BUXUS microphylla kereana 1.00 1/4 oz.	3.00	1.00	2.85
sempervirens			
CALLICARPA dichotoma (purpurea)	4 50	2.80	8.00
japonica	1.50	2.75	7.50
CALLISTEMON viminalis 1.50 1/4 oz.	5.00		
CALLUNA vulgaris, clean 1.00 1/4 oz.	2.00		
CALYCANTHUS floridus		1.00	2.75
occidentalis		2.35	6.50
CAMELLIA japonica, from garden specimens,			
Japanese collection		.90	2.50
iaponica, from garden specimens, European			
collection		90	2.50
sasanqua		1.00	2.75
CAMPSIS (Bignonia) grandiflora		1.25	3.50
radicans		1.10	3.00
CARAGANA arborescens		.70	2.00
boisi	2.25		
CARPINUS betulus, clean		.50	1.25
caroliniana, clean		1.50	4.25
tschonoski		2.25	6.25

CARYA illinoensis (Pecan)	oz.	1/4 lb.	lb.
laciniosa per bushel (50 lbs.)			.50
ovata per bushel (50 lbs.)			
CARYOPTERIS clandonensis, clean 1.00 1/2 oz.			
CASSIA artemisioides	2.75		
floribunda	2.75		
tomentosa	2.10		
CATALPA bignonioides		.50	1.20
ovata		.75	2.00
speciosa		1.20	3.25
CEANOTHUS americanus	.80	2.20	6.00
arboreus	2.00		
arboreus hybrids	2.00		
integerrimus	2.50		
leucodermis (divaricatus) var. eglandulosus	2.50		
megacarpus	2.50		
palmeri	2.50		
purpureus	2.50		
spinosus	2.00		
thyrsiflorus			
tomentosus olivaceus	2.50		
Verrucosus	2.50		
CEDRUS atlantica		1.30	3.75
atlantica argentea		1.40	4.00
atlantica glauca		1.70	4.75
deodara		1.30	3.75
libani CELASTRUS orbiculatus, clean		1.50	4.25
scandens, clean		1.20	3.25
CELTIS mississippiensis (laevigata), d.b.		2.20	6.00
occidentalis, d.b.		.90	2.50
CEPHALANTHUS occidentalis, clean		.70	2.00
CEPHALOTAXUS drupacea		.75	2.10
fortuni		.65	1.75
CERATONIA siliqua		.65	1.85
CERCIDIPHYLLUM japonicum	1 50	.45	1.25
CERCIS canadensis, Northern seed	1.50	2.80	8.00
canadensis, Southern Seed		1.10	3.00
chinensis		1.00	2.75
occidentalis		1.65	4.50
siliquastrum			4.00
siliquastrum alba		.50 .90	.120
CHAENOMELES japonica (maulei) (dwarf type)		1.50	2.50
lagenaria (Cydonia jap.) bush type, domestic		1.50	4.25
seed, largely from red plants, N. E		1.70	4.75 2.50
lawsoniana allumi, blue, clumnar shaped form		1.40	4.00
lawsoniana argentea		1.30	3.75
lawsoniana aurea		1.25	3.50
lawsoniana pendula glauca		1.30	3.75
lawsoniana pyramidalis		1.10	3.00
lawsoniana i riumph de Boskoon, choice blue form			3.75
obtusa		1.15	3.25
pisifera		1.35	3.75
pisitera filifera			4.50
thyoides glauca 1.00 ½ oz.	2.50	1.05	4.00
1100 /4 02.	-100		

CUAMAEDODO humilia	oz.	1/4 lb.	
CHAMAEROPS humilis		.50	1.25
CHILOPSIS linearis		2.70 1.00	7.50 2.75
CHIONANTHUS (Meratia) praecox		1.65	4.50
CHIONANTHUS virginicus, clean		.65	1.80
CINNAMOMUM camphoraglanduliferum		1.00	2.75
CLADRASTIS lutea		1.65	4.50
platycarpa		1.50	4.25
CLEMATIS paniculata, imported		1.65	4.50
patens, N. E.	1.50	1.05	7.50
viticella	1.50	.90	2.50
CLERODENDRON trichotomum		1.30	3.75
CLETHRA acuminata, clean2.00 1/4 oz.		1100	0., 0
alnifolia, N. E., clean	4.00		
barbinervis, clean			
fargesi, clean			
COCCULUS carolinus		.70	2.00
COLUTEA arborescens		.65	1.75
CORDYLINE (Dracaena) indivisa		1.00	2.85
CORNUS alba		1.65	4.50
alternifolia, d.b.		1.10	3.00
amomum, clean		1.25	3.50
canadensis, d.b.	.85	1.85	5.50
capitata		.80	2.25
controversa		1.30	3.75
florida, Southern, clean		1.25	3.50
florida, climatic Zone 6, clean		1.30	3.75
florida, N. E., Zone 5, clean		1.40	4.00
florida, from Redflowering Dogwood, d.b		1.40	4.00
kousa, clean	1.50	1.40 4.25	4.00
kousa chinensis, N. E., clean	1.50	.60	1.50
mas, clean		1.25	3.50
nuttalli, d.bofficinalis, clean		1.30	3.75
racemosa (paniculata), clean		1.10	3.00
racemosa (paniculata) d.b.		.60	1.50
sanguinea, clean		.50	1.25
stolonifera, d.b.		.65	1.75
CORONILLA emerus	.60	1.50	1.75
CORYLOPSIS sinensis, N. E	2.50	11.00	
CORYLUS americana		.90	2.50
avellana		.50	1.25
COTINUS coggygria (Rhus cotinus)		.90	2.50
COTONEASTER adpressa praecox, d.b.	1.40		11.00
apiculata, d.b.	2.00	4.00	11.00
bullata floribunda, d.b.	1.00	2.50	
dielsiana, clean	1.00	2.20	6.00
dielsiana elegans, d.b.	1.50	2.20	0.00
*dielsiana major, clean	1.50	2.00	5.75
divaricata, clean		1.70	4.75
foveolata, clean, N. E. better habit and foliage, more		1.70	7.73
disease resistant than either Cot. acutifolia or lucida		2.20	6.00
francheti, clean		1.65	4.50
horizontalis, clean		1.75	5.00
horizontalis perpusilla, d.b.	1.25	1.75	0.00
non izontana perpuanta, u.b.	1.20		

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COTONEASTER (continued)	oz.	1/4 lb.	lb.
horizontalis prostrata, choice subspecies of procumbent	;		
nabit, good for rock gardens, d.b.	2.00		
multinora, a.b.		2.20	6.00
*multiflora calocarpa, d.b		2.00	5.75
pannosa, clean		1.65	4.50
raceminora destontaini (typica), d.b.	1.00	2.50	
raceminora nummularia (Meveri), d.h.	1.25		
racemitiora songarica, d.b.	1.00	2.50	
racemitiora veitchi, clean		2.20	6.00
rosea, d.b	1.50		
salicifolia, clean		2.20	6.00
simonsi, clean		1.75	5.00
thymifolia, d.b	1.50		
zabeli, d.b		2.00	
CRATAEGUS crus-galli, clean		.90	2.50
monis, clean		1.10	3.00
monogyna (oxyacantha mon.)		.50	1.25
oxyacantna		.60	1.50
punctata, clean		1.40	4.00
CRYPIOMERIA japonica, European seed		1.20	3.25
Japonica, Oriental seed		1.40	2.75
Japonica Joppi		1.40	4.00
CUNNINGHAMIA lanceolata		1.50	4.25
CUPRESSUS arizonica (glabra or bonita) domestic seed		1.50	4.25
from pyramid specimens			
arizonica, imported seed, from plants in cultivation		1.75	4.75
forbesi		1.25	3.50
funebris	2.75		
goveniana		1.10	3.00
lusitanica (alauca)		1.10	3.00
lusitanica (glauca)		.90	2.50
lusitanica benthami		1.00	2.75
macrocarpa from gorden		1.65	4.50
macrocarpa, from garden specimens		1.75	5.00
macrocarpa, from northern sources, British Isles	.85	2.20	6.00
macrocarpa glauca	.85	2.20	6.00
sempervirens		.60	1.50
sempervirens horizontalis		.60	1.40
sempervirens stricta		.60	1.50
stephensoni (Cuyamaca Cypress), choice new California	L		
mountain Cypress from high elevation 1.25 1/4 oz.	3.50		
torulosa		1.00	2.75
torulosa majestica		1.20	3.25
CYCAS revoluta 100 seeds 4.00			
CYDONIA (see also Chaenomeles) oblonga (vulgaris)		1.05	
CYTISUS hirsutus			5.50
multiflorus	1.00	2.50	
multiflorus White Com		1.00	2.50
multiflorus, White Gem	1.50		
nigricans	.85	2.35	6.50
purpureus	1.00	2.50	
scoparius		.60	1.50
scoparius andreanus, yellow with crimson wing	1.50	4.25	
scoparius andreanus hybrids (dallimorei), vari-colored			
flowers in pastel shades of yellow, rose and white			
1.00 ½ oz.	2.85		
sessilifolius		2.35	6.50

	oz.	1/4 lb.	· lb.
DAPHNE laureola		1.40	4.00
mezereum		1.25	3.50
DEUTZIA scabra (crenata)		1.50	4.25
DIOSYPROS kaki		.65	1.75
lotus		.50	1.25
virginiana		.50	1.25
virginiana, northern	•••	.60	1.50
virginiana, from trees in cultivation		.70	2.00
DISANTHUS cercidifolius	1.00	2.80	8.00
DRACAENA draco, clean 250 seeds 2.50—1000 seeds 7.50			
ELEAGNUS angustifolia, clean		.50	1.25
commutata (argentea), clean		.80	2.25
umbellata, clean		1.35	3.75
ELSHOLTZIA stauntoni			
ENKIANTHUS campanulatus, N. E 1.25 $\frac{1}{4}$ oz.			
cernuus rubens, N. E 1.00 1/32 oz.			
ENTEROLOBIUM cyclocarpum 1,000 seeds	5.00		
ERICA carnea, clean 1.00 1/4 oz.	2.50		
ERYTHRINA corallodendrum			
250 seeds 2.50—1,000 seeds 6.50			
crista-galli			
EUCALYPTUS botryoides		2.50	7.00
camaldulensis (rostrata)		1.30	3.75
globulus, clean		2.35	6.50
EUONYMUS alatus, clean		1.25	3.50
atropurpureus, d.b.		1.10	3.00
europaeus, clean		.70	2.00
fortunei (radicans) clean		1.30	3.75
japonicus, clean		1.10	3.00
*sachalinensis (planipes), N. E., clean	1.00		
yedoensis, d.b., N. E		2.00	
EXOCHORDA grandiflora		1.40	4.00
FAGUS sylvatica, Central Europe			1.10
sylvatica, North Europe			1.25
sylvatica atropurpurea, North Europe			1.85
FATSIA japonica 1000 seeds 2.50			
FEIJOA sellowiana 1000 seeds 3.50			
FIRMIANA simplex		.80	2.25
FRANKLINIA alatamaha 100 seeds 1.50, 1000 seeds 9.00			
FRAXINUS americana, true type			1.65
excelsior		4.40	1.00
mandshurica		1.10	3.00
nigra		.80	2.25
ornus			1.00
pennsylvanica (pubescens), N. E.		.60	1.50
pennsylvanica lanceolata			1.00
FREMONTIA californica 1.25 1/4 oz.	3.50		
mexicana 1.25 $\frac{1}{4}$ oz.	3.00		
GARDENIA jasminoides (florida)		2.20	6.00
GAULTHERIA procumbens, d.b.	1.75	_	
GENISTA aethnensis	.50		
canariensis	1.00		
fragrans	1.10		
germanica	1.00		0
monosperma		.90	2.50

F. W. SCHUMACHER	Sand	wich,	Mass.
GENISTA (continued) pilosa	oz. 1.00	1/4 lb	. Ib.
radiata			
tinctoria		1.65	4.50
GINKGO biloba		.70	2.00
GLEDITSIA japonica		1.25	3.50
sinensis		1.00	2.75
triacanthos		.50	1.10
triacanthos inermis		.60	1.50
GREVILLEA robusta		6.00	20.00
GYMNOCLADUS dioicus			1.00
HALESIA carolina (tetraptera)		.90	2.50
diptera		1.10	3.00
monticola		.90	2.50
HAMAMELIS japonicajaponica flavo-purpurascens		1.65	4.50
mollis, N. E.	2.00	1.80	5.25
vernalis	1.50	4.25	
vernalis tomentella	2.00	5.75	
virginiana	1.00	2.75	7.50
HIBISCUS syriacus		.60	1.50
syriacus, white flowered		.65	1.75
HIPPOPHAE rhamnoides			
HOVENIA dulaia		.80	2.25
HOVENIA dulcis		1.20	3.25
HYDRANGEA petiolaris, true to name, N. E. 1.00 1/32 oz.			
HYPERICUM frondosum (aureum) 1.00 1/8 oz.			
kalmianum 1.00 ½ oz.	3.00		
IDESIA polycarpa		2.20	6.00
ILEX aquifolium, clean		.65	1.75
aquitolium, from garden varieties		1.20	3.25
aquifolium, from domestic orchards, clean		1.40	4.00
*cornuta, domestic, cleaned and floated		2.20	6.00
crenata convexa (bullata) N. E., d.h.	1.00		
glabra, d.b.		.65	1.75
latifolia		2.00	5.75
opaca, clean		2.75	4.75
opaca, clean, northern sources, Zone 6		2.20	6.00
pedunculosa, clean		1.80	5.25
serrata (sieboldi), clean verticillata, clean, N. E.		1.85	5.50
INDICOFERA doore		2.80	8.00
INDIGOFERA dosua	1.25		
JUGLANS cinerea, N. E per bushel (28 lbs.) 7.50			
nigra per bushel (40 lbs) 11 00			
sieboldiana		.50	1.25
sieboldiana cordiformis		.50	1.25
JUNIPERUS californica, clean		3.50	10.00
chinensis, clean		1.30	3.75
chinensis sargenti, clean		2.20	6.00
communis upright columns tone		2.75	7.50
communis, upright columnar type, clean		2.60	2.00
conferta, (litoralis), clean		2.50	7.00
* pachyphloea, clean procumbens, clean		2.35	6.50
rigida, clean		2.35	6.50
scopulorum, clean, northern		1.65	4.50
, and and of the first the		1.65	4.00

		,	
JUNIPERUS (continued)	oz.	1/4 lb.	
virginiana, Northern form, from plants in cultivation		1.50	
virginiana, Platte River type, clean		1.70	4.75
virginiana glauca, clean		1.75	5.00
KALMIA latifolia, New England, from garden			
specimens 1.00 1/4 oz.	2.50		
latifolia, from Red flowered selections			
1.25 pkt., 2.00 1/32 oz.			
latifolia fuscata, brown-eyed Mountain Laurel, a form			
distinguished by its flower variation and compact			
habit 1.25 pkt., 2.00 1/32 oz.			
KALOPANAX pictus (Acanthopanax ricinifolius)		2.00	6.00
KERRIA japonica		1.50	4.25
KOELREUTERIA paniculata		.65	1.75
KOLKWITZIA amabilis, clean, viable seed by cross polin-			
ation in group plantings, N. E.	2.00	5.50	15.00
LABURNUM alpinum		1.00	2.85
anagyroides (vulgare)		.90	2.50
watereri (vossi), (anagyr. x alpinum) 1.00 1/4 oz.	3.00		2100
	0.00	1.65	4.50
LARIX decidua (europaea) Eastern Alps,		1.05	4.50
elev. 3,000 - 4,200 ft.		2.75	7,50
decidua, sudetica type, foothills of Eastern Alps,		2./ 5	7.50
1,200 - 2,100 ft. OR	2.00	5.60	16.00
decidua, large seeded franco-swiss strain from Western	2.00	5.00	10.00
High Alps, 6,000 ft., of late starting and early term-			
inating growth cold and wind registant straight			
inating growth, cold and wind resistant, straight, tall, rapid grower, a good timber tree, a fine orna-			
mental. OR.		2.35	3.75
leptolepis		2.50	7.00
LAURUS nobilis, d.b.			1.00
LESPEDEZA bicolor, clean, domestic seed		.90	2.50
buergeri		1.25	3.50
thunbergi (formosa)		1.20	3.25
LEUCOTHOE catesbaei 1.00 1/4 oz., 2.50 oz.		1.20	3.23
LIBOCEDRUS recurrens		.90	2.50
LIGUSTRUM amurense "North Privet", d.b.		.70	2.00
japonicum, d.b.		.65	1.75
lucidum, d.b.		1.00	2.75
obtusifolium (ibota of trade), d.b.		.90	2.50
sinense ("South" Privet), d.b.		.50	1.10
vulgare, clean		.70	2.00
LIQUIDAMBAR styraciflua	1.00	2.35	6.50
LIRIODENDRON tulipifera	1100	.70	2.00
LONICERA caprifolium, clean		1.75	5.00
etrusca, clean		1.70	4.75
henryi, d.b., N. E.	1.75		4.75
japonica, clean	111	2.20	6.00
korolkowi zabeli, fine red flowered form, d.b.	1.50	2:20	0.00
maacki pedocarpa, d.b., N. E.	1.00	3.00	
morrowi d.b., N. E.	1.00	2.20	6.00
morrowi, yellow fruited, d.b.		2.00	5.50
ruprechtiana, d.b., N. E.		2.00	6.00
tatarica, clean		1.10	3.00
tatarica, crean tatarica wheeleri (red), d.b., N. E.	1.00	2.00	3.00
xylosteum, clean	1.00	1.80	5.25
Ayrosteum, tream		1.00	0.23

A .	oz.	1/4 lb.	lb.
MAACKA amurensis		1.30	3.75
MACLURA pomifera		.65	1.75
MAGNOLIA denudata (conspicua), d.b.		1.40	4.00
grandiflora, clean		1.10	3.00
kobus, clean		1.50	4.25
liliflora, d.b.		1.35	3.75
soulangeana, d.b.		1.40	4.00
virginiana (glauca), clean		1.85	5.50
MAHONIA aquifolium, clean		2.40	6.50
MALUS baccata, clean	2.00	5.60	16.00
baccata, dried pomes		1.00	2.75
baccata mandshurica, dried pomes		1.10	3.00
coronaria, clean	1.30		10.00
floribunda, clean	2.00		14.00
ioensis, clean	1.35	3.75	
*sargenti, dried pomes, N. E., Free blooming, dwarf			
ornamental Crab, true from seed		1.75	5.00
sieboldi, clean	1.25	3.10	8.50
sieboldi arborescens, clean, N. E. tree of moderate size,			
faster growing than sieboldi, handsome in flower			
and with prominent display of fruit	2.25		18.00
sikkimensis, dried pomes		1.50	4.50
theifera (hupehensis), clean, handsome small tree,			
very free blooming, true from seed	2.25		18.00
zumi, clean	1.25	3.10	8.50
zumi calocarpa, dried pomes		.90	2.50
MELALEUCA leucadendron	1.25	3.25	
MELIA azedarach		.70	2.00
MESPILUS germanica, clean		.70	2.00
MORUS alba, clean		.90	2.50
alba tatarica, clean	4.00	2.20	6.00
new midwestern species, tentatively named americana	1.00	2.50	0.00
nigra, clean		1.10	3.00
MYRICA pennsylvanica (carolinensis) N. E		.90	2.50
MYRTUS communis, clean		2.20	6.00
NANDINA domestica, clean		1.25	3.50 4.25
domestica, white berries, clean		1.50 1.40	4.00
NYSSA sylvatica, cleanOLEA europaea, seed from Orchard varieties		.60	1.50
ORIXA japonica		2.20	6.00
OSMANTHUS ilicifolius (aquifolium), domestic seed		2.20	6.00
OSTRYA carpinifolia, clean		1.35	3.75
virginiana, clean		2.20	6.00
OXYDENDRUM arboreum, clean	1.25		
PAEONIA suffruticosa (arborea or moutan), from			
choice domestic collection	1.40	4.00	11.00
PARKINSONIA aculeata		1.25	3.25
PARTHENOCISSUS (Ampelopsis) quinquefolia, clean		.65	1.75
tricuspidata (veitchi), clean		.80	2.25
	4.00		
PASSIFLORA coeruleaincarnata	1.30		10.00
	1.75		12.00
PAULOWNIA tomentosa		.65	1.75
PHASEOLEUS caracalla 100 seeds 1.00; 1,000 seeds 6.00			
PHELLODENDRON amurense, clean		1.40	4.00

DILLI ADDI DILLI	oz.	1/4 lb. lb.
PHILADELPHUS coronarius, clean		1.35 3.75
grandiflorus, clean		1.25 3.50
PHOENIX canariensis		.50 1.20
dactylifera		.90 2.50
PHOTINIA villosa, clean		1.65 4.50
PHYSOCARPUS opulifolius (Spiraea opul.), Ninebark		2.20 6.00
PICEA abies, Boehmerwald, fast growing hill type,		
1600 - 2400 ft., the best Norway Spruce timber		
stands, the tallest and largest trees are found in		
Boehmerwald region of Central Europe. OR.		2.00 5.75
abies, Northern Foothills of Alps Mts. Central Europe,		
1,500 - 2,700 ft., from a narrowly defined area with		400 505
a rain climate due to oceanic influences. OR		1.80 5.25
Europe, a rain shadow area with dry, warm sum-		
mers 1,500-2,400 ft. (from lower levels available		
on request.) OR.		2.35 6.50
abies, seed from Central Mountains of Germany, Harz		
and adjacent mts., 1,200-1,800 ft. strain preferred		
by growers of stock for landscaping. OR		2.00 5.75
abies, from alpine origins, Central Alps Mt., Europe,		
3,000-4,500 ft., slow growing, recommended for		0.05 0.50
high elevations and container grown stock. OR. abies, Central European origins		2.35 6.50 1.30 3.75
abies, Northwestern Europe, Ardennes Mts. and Mts. of		1.50 5.75
France, fast growing strains, recommended for		
seedling growers. OR.		2.20 6.00
abies, Lowland strain, South Sweden, near sea-level,		
the hardiest and most wind-burn resistant strain		
of the Central European race of Norway Spruce		
(not the slow growing arctic type), the best strain		4.05 5'50
for the Northern states and Canada. OR		1.85 5.5 0
abies, subarctic type, from Central Sweden or Finland. Well suited, because of its moderate rate of growth,		
for landscaping and container grown Christmas		
trees, also for planting under adverse northern		
conditions. OR.		1.80 5.25
abies, domestic Lake States. OR.	1.25	3.50 10.00
engelmanni	1.25	3.50 10.00
glauca, Lake States	2.00	5.50 15.00
glauca (canadensis) from planted stands near sea-level,		
Northern Europe. For seed quality and excellence of stock this strain has found many friends, since		
we introduced it nearly thirty years ago. OR		1.25 3.50
glauca densata (Black Hills)	2.00	5.50 15.00
pungens		5.50 15.00
pungens glauca	2.35	6.50 17.50
sitchensis	2.00	5.00 14.00
PIERIS floribunda, N. E	4.50	
japonica, N. E	2.50	
PINUS aristata	1.35	3.20 8.50
banksiana	1.00	2.70 7.50
canariensis		1.75 5.00
caribaea		2.20 6.00
cembra		.60 1.50

PINUS (continued)	oz.	1/4 lb	
cembroides edulis	4	1.30	
contorta, true Shore Pine Brit. Colcontorta latifolia (murrayana)	1.75		12.25
coulteri	1.40	3.35	11.00
densiflora	1,20	1.20	3.25
echinata	2.00		14.00
flexilis		1.40	4.00
griffithi (excelsa)		1.20	3.25
naiepensis		.60	1.50
halepensis brutia		1.25	3.50
jeffrey;		2.20	6.00
koraiensis Iambertiana		1.20	3.25
monticola	1.00	1.75	5.00
mugo (montana), Lowland seed	1.00	2.70 1.25	7.50 3.50
mugo mughus, Tyrolean Alps, dwarf type. OR.	1.00	2.35	6.50
mugo pumilio, dwarfest of mugo group from Eastern	1.00	2.33	0.50
Alps (limestone). OR.	1.25	3.35	9.00
mugo rostrata (uncinata) European Alps		2.80	8.00
nigra, Hill strain, elev. 900-1.500 ft. from the heart of			
Austrian Pine country in Austria. OR.		1.20	3.25
Same, elevation 1,500 - 2,400 ft. OR.		1.25	3.50
nigra, Central European sources		.90	2.50
palustris parviflora (pentaphylla)		1.10	3.00
patula		1.40	4.00
pinaster (maritima)		.60	3.75 1.25
pinea		.60	1.50
ponderosa, Colorado		1.65	4.50
ponderosa, Idaho		1.80	5.25
ponderosa scopulorum		1.40	4.00
pumila		2.20	6.00
radiata (insignis)		1.20	3.25
resinosa, Lake States. ORrigida, New York State	2.00		14.00
sabiniana		2.60	7.25
strobus, Lake States. OR.		.80 3.35	2.25
sylvestris, Scotch Pine, for diversity of requirements a		3.33	9.00
choice of strains is offered. See Page 26. Pine Lore.			
A. Strains from the plains of Northern Europe.			
Seed from Belgium, Campine Strain. OR.		1.85	
Seed from North German Low Plain. OR.		3.50	10.00
Seed of West Baltic origin, Sweden. OR.	2.00	5.60	16.00
B. Mountain Strains.			
Seed from Highland forests in France. OR.		1.85	E E0
Seed from Vosges Mts. France. OR.		5.50	5.50
Seed from Austrian Forests, hill strain. OR.			6.00
Seed from Spain:		0	0.00
Burgos Province, North Spain, elevation			
3,000 - 4,800 ft.		2.80	8.00
Guadalajara, Central Spain, elevation			
4,200 - 5,100 ft.		3.00	8.25
Guadarrama Mts. North Central Spain, elevation 3,500 - 4,000 ft.		0.50	40.55
010 ration 0,000 - 1,000 It.		3.50	10.00

PINUS sylvestris (continued) C. Insular isolation has set apart as distinctive for practical purposes the Scotch Pine races indigenous to England. Favorable reports regard them as	oz.	1/4 lb.	lb.
suitable both for timber and Christmas tree pro-			
duction.			
Seed from government forests in East Anglia, near			
sea level, on inquiry. OR			
100 - 650 ft. OR.	1.65	4.60	12.75
taeda		2.50	7.00
thunbergi, domestic, from shore plantings, N. E	1.00		
thunbergi, Japan		1.25	3.50
torreyana	1.30		9.00
PITTOSPORUM tobira, clean		1.10	3.00
PLATANUS occidentalis		.50	1.25 1.25
orientalis, clean		.50	1.20
PLUMBAGO capensis		1.30	3.75
PODOCARPUS macrophyllanagi		1.20	3.25
POINCIANA gilliesi		1,20	3.25
(Delonix) regia		2.20	6.00
PONCIRUS (Citrus) trifoliata		.50	1.25
PRUNUS—see also under Fruit Seeds.			
amygdalo-persica, Hardy Almond	.70		
hessevi. clean		1.25	3.50
campanulata		1.25	3.50
caroliniana		.60	1.50 4.25
incisa, clean, imported		1.50 1.25	3.50
japonica		.70	2.00
laurocerasus (officinalis), clean		1.35	3.75
maritima, clean, N. E		.50	1.25
padus, clean, imported		1.40	4.00
salicina (triflora)		.45	95
*sargenti (serrulata sachalinensis) clean		1.25	3.50
serotina. clean		.60	1.50
serotina, d.b., N. E.		.50	1.10
- serrulata. clean		.90	2.50
subhirtella, clean		1.00	2.75 3.25
subhirtella pendula, clean	1.00	1.20	3.23
tomentosa, domestic, clean	1.00	.90	2.50
tomentosa, imported		.70	2.00
virginiana, cleanvirginiana melanocarpa, clean		.80	2.25
yedoensisyedoensis		.90	2.50
yearensis		1.25	3.50
PSEUDOLARIX amabilis (kaempferi)			0.00
PSEUDOTSUGA taxifolia caesia, Interior strain, Idaho,	. 2.00	0 465	12.00
Montana, Eastern Washingtontaxifolia glauca, Colorado strain	1.25		16.50
taxitona giauca, Colorado strain	1120	.70	
PTELEA trifoliata	,		
PUERARIA thunbergiana	•	.70	
PYRACANTHA coccinea, clean	,	.90	
coccinea lalandi, clean		1.10	3.00
coccinea lalandi, d.b. N. E. hardy strain, plants		1.75	5.00
wintering at Boston	•	1.75	5.00

.90 2.20 1.10 1.40 .70

.95 .90 1.25

2.50 6.00

3.00 4.00

PYRUS—see Fruit Seeds, Page 19
Olichouse Fruit Seeds, Page 19
QUERCUS palustris—not less than 5 lbs. sold
QUERCUS, import items, orders for not less than 10 ths
accepted prior to December 1st.
ilex
robur
suber
RHAMNUS cathartica, clean
davurios closp
davurica, clean
frangula, N. E., d.b.
purshiana, clean
RHODODENDRON—Items marked (*) are supplied to us
in selfed (hand-pollinated) seeds of northern origin
by noted expert. Packets as offered contain several
nundred seeds.
*adenogynum 1.00 pkt.
arboreum75 1/2 07
augustini
auriculatum 100 nkt
parpatum
*Callimorphum 100 nkt
Catopitytum100 pk+
"caloxantnum 100 nkt
canadense (Rhodora), N. E. 100 1/16 oz 75 nkt
cantabile
carolinianum, N. H. 75 pkt 200 l/ a-
carolinianum, pijish 75 pist
caronnianum, white
100 1/16 oz 200 1/
catawblense compactum. N E 75 nb+ 100 1/16 n-
caucasicum75 pl.
cerasinum
charitopes 1.00 pkt.
Chartophyllum 100 -1-1
cinnabarinum
Concinnum
croceum
*decorum
diaprepes
discolor
laiconeri
"Tardesi
161 rugineum 50 nb+ 100 1/
"ilctoracteum
fortunei Lu Shan, a hardy strain F 1 generation
ITOM China seed, hand-nollinated N E
1.25 1/32 oz 3.00 1/ oz
Tortunel, N. E., from trade specimens
1 25 1/32 07 2 00 1/
100 mlst
gitersonianum
griffithlanum
100 -1-1
mppophaeoldes
hirsutum
150 pkt., 1.00 1/8 0z.

	Canu	/VICII,	viass.
RHODODENDRON (continued)	oz.	1/4 lb.	lb.
hodgsoni		, ,	
insigne			
Intricatum1.00 pkt			
keysi 1.00 pkt.			
leucaspis			
macabeanum			
macrophyllum 1.00 1/16 oz., 3.00 1/4 oz.			
maximum, N. E	3.50		
*neriiflorum			
orbiculare			
ponticum, Northern Europe			
ponticum, seed from hardy selections, N. E., with			
their airy grace and daintiness of bloom, true			
ponticum plants have a charm all their own.			
nraevernum, N. E			
puralbum 1.00 pkt.			
racemosum 1.00 pkt.			
smirnowi			
*souliei 1.00 pkt.			
*sutchuenense			
*thomsoni 1.00 pkt.			
*vernicosum 1.00 pkt.			
*wardi 1.00 pkt.			
williamsianum			
*yunnanense 1.00 pkt.			
RHODODENDRON HYBRIDS: see listing on pages 23-25			
RHODOTYPOS scandens (kerrioides)		1.40	4.00
RHUS canadensis (aromatica), clean		1.50	4.25
coppalina, clean		1.00	2.75
cotinus, see Cotinus coggygria			
glabra, clean		1.00	2.75
trilobata, clean		1.25	3.50
ROBINA hispida fertilis	1.30	3.60	10.00
pseudoacacia, imported seed (the Eastern U. S. strain)		.50	1.25
pseudoacacia, domestic seed, Idaho strain		.70	2.00
ROSA arkansana, clean		2.20	6.00
landa, clean		1.65	4.50
canina, clean		.50	1.10
carolina (humilis) d.h.		1.25	3.50
eglanteria (rubiginosa), clean		1.00	2.75
micrantha, d.h.	1.00		
multiflora, thornless, clean		1.00	3.00
multiflora, thorny, clean	4.00	.90	2.50
rubrifolia, N. E., d.h.		2.75	
rugosa, clean	1.50	1.20	3.25
rugosa, deep red selection, N. E., clean		2.00	3.23
rugosa, white, N. E., clean		2.00	
setigera, clean		2.20	6.00
spinosissima, d.h.		1.25	3.50
virginiana (lucida), clean		2.20	6.00
wichuraiana, clean		1.00	2.75
xanthina spontanea, d.h.	1.50		
RUSCUS aculeatus, clean		1.00	2.85
,			55

1.10			
1.50	OAMBUOUS and also does	oz.	/ T
1.20 3.25			
SAPINDUS drummondi			
Mukorossi 1.00 2.75	· ·		.90 2.50
SCHINUS molle terebinthifolius			
terebinthifolius SCHIZOLOBIUM parahybum (excelsum), tall (to 100 ft.), fast growing, tropical timber and ornamental tree, large fernlike foliage, masses of flowers in large golden sprays SCHIZOPHRAGMA hydrangeoides SCIADOPITYS verticillata SEQUOIA gigantea, from high elevations, 6,500–7,000 ft. sempervirens, California seed only SHEPHERDIA argentea, clean SOPHORA japonica Japonica, seed from pendula form SORBUS alnifolia, clean arricana, d.b. aria, clean aucuparia, domestic, d.b., N. E. commixta, d.b., N. E. decora, d.b. domestica, clean SPARTIUM junceum STEWARTIA monadelpha, N. E. SSTYRAX japonica SYMPHORICARPUS albus (racemosus) orbiculatus (vulgaris), d.b. SYMPLOCOS paniculata, conspicuous in flower (white) and fruit (bright blue) SYRINGA amurensis japonica, domestic seed, N. E. amurensis japonica, imported henryi (villosa x josikaea) pekinensis, N. E. vulgaris alba TAXODIUM distichum 1.80 2.50 2.40 2.50 7.00 2.00 2.50 7.00 2.00 1.75 4.50 1.20 2.40 6.75 5.50 7.00 2.00 1.75 4.50 1.20 2.60 1.75 4.50 1.20 2.60 1.10 3.00 1.10 3.00 1.10 3.00 1.25 3.01 1.20 4.00 3.01 1.20 4.00 3.01 3.01 3.01 3.02 3.03 4.00 3.03 4.00 3.03 4.00 3.04 3.05 3.07 3.05 3.07 3	SASSAFRAS albidum (varifolium)		1.10 2.75
SCHIZOLOBIUM parahybum (excelsum), tall (to 100 ft.), fast growing, tropical timber and ornamental tree, large fernlike foliage, masses of flowers in large golden sprays 1.75 4.50 12.00 SCHIZOPHRAGMA hydrangeoides 1.00 2.50 2.40 6.75 SEQUOIA gigantea, from high elevations, 6,500–7,000 ft. sempervirens, California seed only 2.50 1.75 4.50 12.00 SHEPHERDIA argentea, clean 50PHORA japonica 6.0 1.40 1.85 5.50 1.75 5.00 20.00 1.75 4.50 12.00 1.85 5.50 1.20 6.00 1.40 1.20 6.00 1.40 1.20 6.00 1.40 1.20 6.00 1.40 1.20 6.00 1.40 1.20 6.00 1.40 1.20 6.00 1.40 1.20 6.00 1.40 1.20 6.00 1.40 1.20 6.00 1.40 1.20 6.00 1.40 1.20 6.00 1.40 1.20 6.00 1.40 1.20 6.00 1.20 6.00 1.20 6.00 1.20 6.00 1.20 6.00 1.20 6.00 1.50 1.20 6.00 1.25 </td <td>SCHINUS molle</td> <td></td> <td></td>	SCHINUS molle		
fast growing, tropical timber and ornamental tree, large fernlike foliage, masses of flowers in large golden sprays			90 2.50
SCHIZOPHRAGMA hydrangeoides			
SCHIZOPHRAGMA hydrangeoides 1.00 2.50 SCIADOPITYS verticillata 2.40 6.75 SEQUOIA gigantea, from high elevations, 6,500-7,000 ft. sempervirens, California seed only 1.75 4.50 12.00 SHEPHERDIA argentea, clean 1.85 5.50 SOPHORA japonica 60 1.40 65 1.75 5.00 SORBUS alnifolia, clean 2.20 6.00 1.10 3.00 2.20 6.00 1.10 3.00 2.20 6.00 1.10 3.00 2.50 7.00 2.00 6.00 1.40 6.65 1.75 5.00 6.00 1.40 6.65 1.75 5.00 6.00 1.40 6.65 1.75 5.00 6.00 1.10 3.00 1.00 2.50 6.00 1.10 3.00 1.00 2.50 7.00 2.00 6.00 1.10 3.00 1.10 3.00 2.50 7.00 2.00 6.00 1.10 3.00 1.25 3.75 7.00 2.00 5.50 1.00 2.50 7.00 2.00 5.50 1.00 2.50 7.00 2.00 1	golden sprays	1.75	4.50 12.00
SCIADOPITYS verticillata 2.40 6.75			2.50
SEQUOIA gigantea, from high elevations, 6,500-7,000 ft. sempervirens, California seed only 2.50 7.00 20,00 SHEPHERDIA argentea, clean 1.75 4.50 12.00 SOPHORA japonica 60 1.40 japonica, seed from pendula form 65 1.75 secundiflora 1.75 5.00 SORBUS alnifolia, clean 2.20 6.00 americana, d.b. 1.00 2.20 6.00 aria, clean 2.20 6.00 2.20 6.00 aucuparia, imported, clean 1.00 2.50 7.00 2.00 2.20 6.00 aucuparia, domestic, clean 1.20 1.00 2.50 7.00 2.00 2.50 7.00 2.50 7.00 2.00 2.20 6.00 1.10 3.00 2.20 6.00 1.10 3.00 2.20 6.00 1.10 3.00 2.25 7.00 2.50 7.00 2.50 7.00 2.50 7.00 2.50 7.00 2.00 2.50 7.00 2.00 2.50 2.00 2.00 2.00 2.00 2.00 2.00 2.00			2.40 6.75
Sempervirens, California seed only 1.75 4.50 12.00		2.50	7.00 20.00
SOPHORA japonica .60		1.75	4.50 12.00
japonica, seed from pendula form secundiflora	SHEPHERDIA argentea, clean		1.85 5.50
Secundiflora 1.75 5.00	SOPHORA japonica		
SORBUS alnifolia, clean 2.20 6.00 americana, d.b. 1.10 3.00 aria, clean 2.20 6.00 aucuparia, imported, clean 1.00 2.50 7.00 aucuparia, domestic, d.b., N. E. 90 2.50 commixta, d.b., N. E. 1.00 2.50 7.00 decora, d.b. 1.25 3.75 domestica, clean 1.25 3.50 10.00 torminalis, clean 85 2.35 6.50 SPARTIUM junceum .60 1.50 STEWARTIA monadelpha, N. E. 1.20 ½ oz. 3.00 koreana, N. E. 1.20 ½ oz. 3.00 STYRAX japonica imported 1.50 4.00 serrata, N. E. 1.20 ½ oz. 3.00 SYMPHORICARPUS albus (racemosus) orbiculatus (vulgaris), d.b. 1.00 2.75 SYMPLOCOS paniculata, conspicuous in flower (white) and fruit (bright blue) 1.35 3.75 SYRINGA amurensis japonica, domestic seed, N. E. 170 4.75 amurensis japonica, imported 4.50 12.00 henryi (vilosa x josikaea) 2.00 5.50 15.00 <td></td> <td></td> <td></td>			
americana, d.b. aria, clean aucuparia, imported, clean aucuparia, domestic, d.b., N. E. commixta, d.b., N. E. decora, d.b. torminalis, clean SPARTIUM junceum STEWARTIA monadelpha, N. E. pseudocamellia, imported serrata, N. E. serrata,			
aria, clean aucuparia, imported, clean aucuparia, domestic, d.b., N. E. commixta, d.b., N. E. domestica, clean torminalis, clean SPARTIUM junceum STEWARTIA monadelpha, N. E. pseudocamellia, imported serrata, N. E. STYRAX japonica obassia SYMPHORICARPUS albus (racemosus) orbiculatus (vulgaris), d.b. SYMPLOCOS paniculata, conspicuous in flower (white) and fruit (bright blue) SYRINGA amurensis japonica, domestic seed, N. E. amurensis japonica, imported henryi (villosa x josikaea) pekinensis, N. E. vulgaris vulgaris vulgaris vulgaris alba TAMARIX gallica TAXODIUM distichum 1.00 2.50 1.00 2.50 1.00 2.50 1.00 2.50 3.00 1.00 2.50 3.00 1.00 2.75 3.00 2.00 2.00 3.00 1.00 2.00 2.00 3.00 1.10 3.00 2.00 2.00 3.00 1.10 3.00 2.00 3.00 1.10 3.00 2.00 3.00 1.10 3.00 2.00 3.00 1.10 3.00 2.00 3.00 1.10 3.00 2.00 3.00 1.10 3.00 2.00 3.00 1.10 3.00 2.00 3.00 1.10 3.00 2.00 3.00 1.10 3.00 2.00 3.00 1.10 3.00 2.00 3.00 1.10 3.00 2.00 3.00 1.10 3.00 3.00 4.00 3.0			
aucuparia, imported, clean aucuparia, domestic, d.b., N. E. commixta, d.b., N. E. decora, d.b. decora, d.b. torminalis, clean torminalis, clean SPARTIUM junceum STEWARTIA monadelpha, N. E. pseudocamellia, imported serrata, N. E. STYRAX japonica orbiculatus (vulgaris), d.b. SYMPHORICARPUS albus (racemosus) orbiculatus (vulgaris), d.b. SYMPLOCOS paniculata, conspicuous in flower (white) and fruit (bright blue) SYRINGA amurensis japonica, domestic seed, N. E. pekinensis, N. E. pekinensis, N. E. pekinensis, N. E. pokinensis, N. E. pokinensis alba TAMARIX gallica TAXODIUM distichum 1.00 2.50 7.00 1.10 3.00 1.20 3.00 1.50 3.00 4.00 4			
Commixta, d.b., N. E. 1.10 3.00	aucuparia, imported, clean	1.00	2.50 7.00
decora, d.b.	aucuparia, domestic, d.b., N. E.		
domestica, clean		1 25	
torminalis, clean			3.50 10.00
STEWARTIA monadelpha, N. E. 1.20 ½ oz. 3.00 koreana, N. E. 1.20 ½ oz. 3.00 pseudocamellia, imported 1.50 ½ oz. 3.00 serrata, N. E. 1.20 ½ oz. 3.00 STYRAX japonica obassia 1.00 2.75 1.35 3.75 SYMPHORICARPUS albus (racemosus) orbiculatus (vulgaris), d.b. 1.00 2.75 7.50 90 2.50 SYMPLOCOS paniculata, conspicuous in flower (white) and fruit (bright blue) 1.35 3.75 1.35 3.75 SYRINGA amurensis japonica, domestic seed, N. E. amurensis japonica, imported henryi (villosa x josikaea) 1.75 4.50 1.75 4.50 josikaea pekinensis, N. E. vulgaris vulgaris alba 2.25 6.00 1.75 4.50 12.00 vulgaris alba 1.80 5.25 TAMARIX gallica .70 2.00 TAXODIUM distichum .60 1.50		.85	2.35 6.50
STEWARTIA monadelpha, N. E. 1.20 ½ oz. 3.00 koreana, N. E. 1.20 ½ oz. 3.00 pseudocamellia, imported 1.50 ½ oz. 3.00 serrata, N. E. 1.20 ½ oz. 3.00 STYRAX japonica obassia 1.00 2.75 1.35 3.75 SYMPHORICARPUS albus (racemosus) orbiculatus (vulgaris), d.b. 1.00 2.75 7.50 90 2.50 SYMPLOCOS paniculata, conspicuous in flower (white) and fruit (bright blue) 1.35 3.75 1.35 3.75 SYRINGA amurensis japonica, domestic seed, N. E. amurensis japonica, imported henryi (villosa x josikaea) 1.75 4.50 1.75 4.50 josikaea pekinensis, N. E. vulgaris vulgaris alba 2.25 6.00 1.75 4.50 12.00 vulgaris alba 1.80 5.25 TAMARIX gallica .70 2.00 TAXODIUM distichum .60 1.50	SPARTIUM junceum		.60 1.50
koreana, N. E.		3.00	
serrata, N. E. 1.20 ½ oz. 3.00 STYRAX japonica obassia 1.00 2.75 obassia 1.35 3.75 SYMPHORICARPUS albus (racemosus) orbiculatus (vulgaris), d.b. 1.00 2.75 7.50 SYMPLOCOS paniculata, conspicuous in flower (white) and fruit (bright blue) 1.35 3.75 SYRINGA amurensis japonica, domestic seed, N. E. amurensis japonica, imported henryi (villosa x josikaea) 1.75 4.50 josikaea pekinensis, N. E. vulgaris vulgaris alba 2.225 6.00 vulgaris alba 1.75 4.50 12.00 TAMARIX gallica 70 2.00 TAXODIUM distichum 60 1.50	koreana, N. E 1.20 1/4 oz.		
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orbiculatus (vulgaris), d.b. .90 2.50 SYMPLOCOS paniculata, conspicuous in flower (white) and fruit (bright blue) 1.35 3.75 SYRINGA amurensis japonica, domestic seed, N. E. amurensis japonica, imported henryi (villosa x josikaea) 170. 4.75 josikaea pekinensis, N. E. pekinensis, N. E. vulgaris vulgaris alba 2.25 6.00 vulgaris alba 1.75 4.50 12.00 vulgaris alba 1.75 4.50 12.00 TAMARIX gallica 70 2.00 TAXODIUM distichum .60 1.50			
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and fruit (bright blue) 1.35 3.75 SYRINGA amurensis japonica, domestic seed, N. E. 170. 4.75 amurensis japonica, imported 1.75 4.50 josikaea 2.00 5.50 15.00 pekinensis, N. E. 2.25 6.00 villosa 1.75 4.50 12.00 vulgaris 2.00 5.25 TAMARIX gallica 1.80 5.25 TAXODIUM distichum 1.50 1.50			.90 2.50
SYRINGA amurensis japonica, domestic seed, N. E. 170. 4.75 amurensis japonica, imported 4.50 12.00 henryi (villosa x josikaea) 1.75 4.50 josikaea 2.00 5.50 15.00 pekinensis, N. E. 2.25 6.00 villosa 1.75 4.50 12.00 vulgaris 1.10 3.00 vulgaris alba 1.80 5.25 TAMARIX gallica .70 2.00 TAXODIUM distichum .60 1.50			135 375
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josikaea		.,	4.50 12.00
pekinensis, N. E. 2.25 6.00 villosa 1.75 4.50 12.00 vulgaris 1.10 3.00 vulgaris alba 1.80 5.25 TAMARIX gallica .70 2.00 TAXODIUM distichum .60 1.50			
villosa 1.75 4.50 12.00 vulgaris 1.10 3.00 vulgaris alba 1.80 5.25 TAMARIX gallica .70 2.00 TAXODIUM distichum .60 1.50			
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vulgaris alba 1.80 5.25 TAMARIX gallica .70 2.00 TAXODIUM distichum .60 1.50		1175	
TAXODIUM distichum	· ·		
	TAMARIX gallica		.70 2.00
distichum, clean	TAXODIUM distichum		
	distichum, clean		.90 2.50

	Cana	V1011, 1114001
TAXUS baccata	oz.	1/4 lb. lb.
baccata erecta, N. E.	1.20	3.25
baccata stricta (fastigiata)	• • • •	1.40 4.00
cuspidata, seed from spreading forms, N. E.	1.30	3,60 10.00
cuspidata, seed from Japan (the so-called capitata		
form)		1.20 3.25
media hicksi, N. E.	1.30	3.60 10.00
THEA (Camellia) sinensis		.60 1.50
THUJA occidentalis	1.00	2.50 7.00
occidentalis, Northeastern or Lake States		3.00 8.50
occidentalis pyramidalis, from own specimens		5.00 15.00
orientalis		.60 1.50
orientalis, New England seed		1.25 3.50
orientalis, from select pyramids, N. E		1.85 5.50
orientalis aurea		1.00 3.00
orientalis aurea nana N. E.		1.50
orientalis compacta (nana)		.90 2.50
orientalis elegantissima		1.00 3.00
orientalis pyramidalis		.80 2.25
plicata	1.75	4.50 12.00
TILIA americana,		.60 1.50
cordata		.65 1.65
japonica		1.25 3.50
platyphyllos		.50 1.25
tomentosa		.50 1.25
TORREYA californica		1.25 3.50
TRACHYCARPUS excelsus (fortunei)		.60 1.50
TSUGA canadensis, Northern crop. OR.	2.00	5.00 14.00
caroliniana, N. E.	2.60	7.20 20.00
diversifolia	1.40	4.00 11.00
heterophylla	2.75	7.50 21.00
mertensiana	2.80	8.00 22.50
sieboldi	1.40	3.75 10.50
ULEX europeaus		.90 2.50
ULMUS americana		1.50
glabra (montana), Scotch Elm		.90 2.50
procera (campestris), English Elm		.90 2.50
pumila		.90 2.50
pumila, wings removed		1.50 4.25
	1.10	3.00
VACCINIUM corymbosum, d.b	1.10	3.00
corymbosum, d.b., from large fruited cultivated named		2.50
varieties		
VIBURNUM acerifolium, d.b.		1.00 2.75
burkwoodi	2.00	0.70 40.00
carlesi, clean, N. E.	2.35	6.70 18.00
carlesi forms, intermediate between carlesi and	0.00	
bitchiuense, d.b.	2.00	5.75
cassinoides, d.b.		1.25 3.50
dentatum, d.b.		.70 2.00
dentatum, clean		1.40 4.00
dilatatum, clean		1.25 3.50
lantana, clean	4 50	.80 2.25
lantanaphyllum (lantana x rhytidophyllum)	1.50	405 0 ==
lentago, clean		1.35 3.75
odoratissimum, clean		1.25 3.50

F. W. SCHUMACHER	Sand	wich, I	Mass.
VIBURNUM (continued)	oz.	1/4 lb.	lb.
opulus, clean		1.00	2.75
prunifolium, clean		1.50	4.25
rhytidophyllum, d.b		1.50	4.25
sargenti, clean		1.25	3.50
setigerum (theiferum) aurantiacum, db., N. E., with			
conspicuous orange-red fruit	1.25	3.50	
sieboldi, clean		1.65	4.50
tinus, clean		.90	2.50
tomentosum, clean		1.25	3.50
trilobum (americanum)		1.85	5.50
wrighti, clean imported		1.65	4.50
wrighti, from grafted specimens, N. E., clean	1.00	2.75	
VITEX agnus-castus		.70	2.00
VITIS riparia (odorata) the true, hardy Riverbank Grape, with fragrant flowers and sweet, very early ripen-			
ing fruit, clean.		2.00	
WASHINGTONIA filifera		.90	2.50
robusta		1.00	2.75
WEIGELA, garden varieties	1.00	1.00	
WISTERIA floribunda, (multijuga) blue		1.10	3.00
frutescens		1.25	3.50
sinensis, blue		.80	2.25
sinensis, white		1.20	3.25
VIICCA hassat			3.23
YUCCA baccata	1.75	4.00	
brevifolia	1.50	3.75	
elata	.85	1.65	4.50
filamentosaglaucaglauca	1.10	3.00	8.50
mohavencie	1.75	4.50	12.00
mohavensis	1.35	3.50	
whipplei (Hesperoyucca wh.)	1.35	3.50	
ZELKOVA serrata		1.35	3.50

FRUIT STOCKS

	1/4 16	. Ib.
APPLE, Common for stock		
Domestic seed from orchard varieties	.80	2.25
summers and mild winters	.70	2.10
dry, warm summers and cold winters	.90	2.50
APRICOT, Common Prunus armeniaca	.50	1.00 1.25
CHERRY, Mahaleb, Prunus mahaleb	.90	2.50
MAZZARD, Prunus avium	.50	1.25
resistant silver bark strain from wild trees	. 70	1.85
PEAR, Common, domestic (Bartlett)	1.30	3.75
French seed	2.20	6.00
Sand, Pyrus pyrifolia (serotina)	2.60	7.25
Ussurian, Pyrus ussuriensis	2.80	8.00
PLUM, American, Prunus americana	.50	1.25
Beach, Prunus maritima, N. E.	1.35	3.75
Myrobolan, Prunus cerasifera	.50	
Myrobolan, seed from Bulgaria, a northern strain	.60	1.50
,		1100
QUINCE, Common, Cydonia oblonga (yulgaris)	1 95	5.50

SEED SPECIALTIES

	oz.	1/4 lb.	lb.
ASPARAGUS plumosus nanus plumosus robustus sprengeri	1.25 1.75 1.00	3.75 5.25 2.80	8.00
CHRYSANTHEMUM, true fall flowering Chrys. Early flowering, double, mixed	4.00		
DELPHINIUM Gold Medal High Quality Improved Strain. American grown from Pacific Giant seed primarily .50 1/16 oz., 1.25 1/4 oz.			
DICENTRA eximia 1.00 1/4 oz.	2.50		
HIBISCUS moscheutos (palustris) N. E., true, native Rose-Mallow, pink and rose	.50	1.50	4.50
LAVANDULA vera (true Lavender)	1.50	4.50	
LUPINUS polyphyllus in separate shares of Blue, Carmine Red, Rose, Salmon, White, Yellow or mixed		.90	2.50
plants	1.00	3.00	
MIMOSA pudica	1.00	3.00	
PAEONIA albifloraperegrina	.45	1.85 1.00	5.5 0 2.85
PRIMULA auricula .65 1/8 oz. japonica .60 1/16 oz. veris, Blue Shades .85 1/8 oz. Giant Munstead, light shades .65 1/8 oz. Large flowered, Border Mixture .65 1/8 oz. Gold Laced .50 1/8 oz. Golden Yellow .50 1/8 oz. Lutea, bright Yellow .50 1/8 oz. Ruby Red .50 1/8 oz. White .50 1/8 oz. Teicher's Colossal strain, giant flowered, wide range of colors .75 1/8 oz.			
THERMOPSIS caroliniana		1.25	3.75
GARDEN ASPARAGUS—Waltham Washington, 20 years of breeding and selection by Mass., Waltham Field Station produced a strain of superior stooling capacity and short top growth, resulting in 25% increased pro-			
duction over old strains		2.20	6.00

AZALEA-Deciduous:

AZALEA VARIETIES of HYBRID ORIGIN

If exclusively taken from this section please have your order amount to at least \$3.00. Packets as offered contain several hundred seeds.

*Embley Strain, a parallel development of the Exbury strain-all colors, shades of yellow, pink, red 1.50 pkt., 2.50 1/32 oz. *Embley Apricot, apricot pink 1.50 pkt., 2.50 1/32 oz. *Ghent strain, all colors 1.25 1/16 oz., 3.75 1/4 oz. *Exbury strain, choice race, a separate development of Knaphill strain, hand pollinated, all colors 1.50 pkt., 2.50 1/32 oz. *Brazil *Hotspur These two best red varieties, crossed with one another. each 2.00 pkt., 3.00 1/32 oz. Basilisk, creamy yellow, darker blotch 1.50 pkt. *Knaphill strain, result of prolonged breeding intercrossing mollis, pontica (ghent), calendulacea and occidentalis strains 1.50 pkt., 2.50 1/32 oz., 7:50 1/2 oz. Mollis varieties (mollis x japonica), from choice collection 1.25 1/16 oz., 3.00 1/4 oz. Named varieties-Al!-1.00 pkt., 1.25 1/32 oz., 3.50 1/8 oz. *Koster's Brilliant Red, glossy orange red *Lemonora, apricot, center rose Louisa Hunnewell, seed from seedlings Louisa Hunnewell x japonica aurea, large flowered vellow *Mrs. Oliver Slocock, rich orange-yellow, suffused terra-cotta *Robespierre, orange-red Rosea x calendulacea 1.00 pkt., 1.50 1/16 oz. Rosea x Louisa Hunnewell 1.00 pkt. Viscosepala (viscosa x mollis) 1.00 pkt. Items marked * usually not available before February-March.

*Altaclarensis (mollis x viscosa) orange yellow,

AZALEA—Evergreen (New England grown):
Glenn Dale varieties 100 pkt., 2.00 1/32 oz.
Hinodegiri 1.00 1/32 oz.
Hinodegiri x mucronata (ledifolia), vigorous, free
blooming Hybrids
Indica (macrantha), late flowering new varieties
of great beauty, pink and rose shades
1.00 pkt., 2.00 1/32 oz.
Mucronata (ledifolia), large flowered varieties 1.00 pkt.
Obtusa arnoldiana (obt. amoena x obt. kaempferi)
Cardinalis, deep red 1.00 pkt., 2.00 1/32 oz.
Pink and Rose shades
Obtusa kaempferi, varieties of kaempferi x malvatica
and kaempferi x hinodegirl parentage, hardy and
free blooming race in shades of pink and rose,
light purple, red and mixed each
100 pkt., 1.25 1/32 oz., 3:50 ½ oz.
Also White 1.00 pkt.
Obtusa kurume, from named varieties 1.00 pkt.
Sanderi, strain offered is of apparent obtusa kaempferi
x indica (macrantha) parentage, very free bloom-
ing, resembling and succeeding the "Malvatica"
strain.
Rose and Salmon shades 1.00 pkt., 1.50 1/32 oz.
Scarlet 1.25 pkt.
Pitti

A.

RHODODENDRON VARIETIES of HYBRID ORIGIN

All packet lots offered contain several hundred seeds.

AMERICAN (NEW ENGLAND) GROWN: Britannia x Fortunei, from a group of selected plants, habit medium, fairly compact, colors, pink and rose shades
Seed from album elegans selections, tall and fast growing, quite true from seeds in shades of white and blush
'America' hand pollinated with fortunei 1.00 pkt., 2.50 1/32 oz. Pink and rose shades 1.00 1/16 oz., 3.00 ½ oz.
Seed from red flowered plants 1.25 1/16 oz., 3.75 1/4 oz. Mixed seeds
Degronianum x Praevernum, hand pollinated Discolor varieties
Dexter plants
New Fortunei Variants—This strain culminates many years of effort by a Cape Cod Breeder towards creation of Red Flowered Fortunei Hybrids. Many crosses with hardy red Hybrids, haematodes and griersonianum as species and in hybrid combinations are involved. ————————————————————————————————————
Smirnowi x Hardy varieties 1.00 pkt. Virgin (farg. hyb. x cataw. alba) 1.00 1/16 oz., 3.00 1/4 oz.

B. Selection of Popular Varieties as grown by English nurserymen. All are time tested and valued for their hardiness, good foliage, full flower trusses, ability to stand exposure:

Varieties each 1.00 pkt., 1.25 1/32 oz., 3.75 ½ oz. Alice, rose pink
Ascot Brilliant, deep crimson
Bagshot Ruby, blood-crimson
Beauty of Littleworth (griffith hyb.) white

Betty Wormald, rose-pink, purple blotch Britannia, bright crimson red Corona, coral pink Doncaster, scarlet crimson Earl of Athlone, bright blood-red Goldsworth Pink, pink Iveryanum, scarlet Jersey Cream, creamy yellow J. J. DeVink, glowing crimson Lady Clementine Mitford, peach pink, deeper margin Lady Primrose, lemon yellow, red spots Loder's White, pale mauve passing to pure white, large trusses Madame De Bruin, cerise red Meg Merillies, creamy white, shaded yellow and apricot Mother of Pearl, blush turning snow-white Mrs. A. R. Bide, deep pink, with brown-crimson ray Pink Pearl, rose-pink Queen Wilhelmina. large luminous cerise red Rose Perfection, deep rose shaded glowing crimson White Queen, pure white Williamsianum Hybrids Yellow Loderi, yellow Blend of all varieties 2.00 1/16 oz., 6.00 1/4 oz.

C. RHODODENDRON VARIETIES as listed in Rhododendron Stud Book of the Royal Horticultural Society. Most all of recent origin, some classical hybrids of long standing. Seedling material of outstanding vigor and brightness may be expected from all of these.

Unless priced otherwise—Packets 1.00 each, 1.50 1/32 oz.

Albatross (Loderi x discolor), tall growing, large leaved, large trusses, white to shell pink.

Aurora (Kewense x thomsoni)

Azor (gries. x discolor), soft salmon pink trumpet

Bowbells (Corona x williamsonianum)

Cornish Cross (thoms. x griff.), superb foliage, large crimson trusses

Cupid (griff. x Luscombei)

Fireball (barbatum x Ascot Brilliant), bright red

Fireglow (fort. hybr. x griers), scarlet

Firetail (Britan. x eriog), fine red shade

Goldsworth Yellow (caucas. x campyl.), apricot changing to yellow

Isabella (griff. x auric), large, fragrant, white

Kewense (griffithianum x fortunei)

Lady Bessborough (disc. x campyl. elatum), vigorous shrub,

creamy yellow-orange, pink-maroon blotch

Lodauric (Loderi x auricul.), large grower, huge trumpets, white, fragrant, late.

Loderi (griff. x fort.)

Variant King George, pink buds opening white

Variant Venus, white, flushed pink

Variant Pink Diamond, clear blush

Luscombei (fort. x thoms.), large pink, excellent foliage Mrs. Kingsmill (Penjerrik, A. M. var.) (campyl. el. x griff.) vellow

Pink Shell (griff. x H. M. Ardene), rose-pink

C. RHODODENDRON VARIETIES (continued)

Seeds of B & C items usually not available before February - March.

SEEDLING GROWERS' REFERENCE

	Ounce	es		Thousands
Austrian Pine	6.4	see	Pinus nigra	26
Red Pine	3.2	see	Pinus resinosa	52
Scotch Pine	4.4	see	Pinus sylvestris	78
White Pine	6	see	Pinus strobus	27
Black Hills Spruce	3	see	Picea glauca densata	188
Blue Spruce	4	see	Picea pungens glauca	106
Norway Spruce	4.4	see	Picea abies	64
White Spruce	2.5	see	Picea glauca	240
Douglas Fir, Blue	6	see	Pseudotsuga taxifolia gla	uca 42
Douglas Fir, Gray	6	see	Pseudotsuga taxifolia caes	sia 42
Hemlock	3	see	Tsuga	187
Larch—European Japanese	8 4	see see	Larix—decidua leptolepis	77 1 18

Figures as given represent average seed counts per pound and approximate amounts in ounces required per 48 square feet of seed bed when broadcast.

PINE LORE

With many growers confused as to what strains of Scotch Pine to plant we feel competent in giving the following suggestions:

Practically all strains are, for some condition or other, suitable both for forest planting, i.e., timber production and for use as ornamentals or Christmas trees.

In general two major races of Scotch Pine concern us here:

Strains from Northern Europe growing on the sandy plains which stretch from the coast of Belgium and Holland all the way east to, and around, the shores of the Baltic Sea. They are considered good strains for reforestation, grow comparatively fast, but usually have the objectionable feature of foliage discoloration with the approach of cold weather. They all do best on deep, sandy soils. If planted on better soils plants have a tendency to "overeat", grow too fast and are prone to fall prey to disease and insect infestations. As an exception as to winter color the Pine strain of the North German low plain warrants attention.

The Mountain Strains from various origins in Europe usually growing on stony soils are better adapted for all around planting. It is from these strains that best results can be expected for use as Christmas tree. Grown on sandy soils plants from these strains may require feeding to show best foliage color.

SCOTCH PINE—Seed from Highland Forest in Southern France (formerly offered as green strain—Western Europe, elevation 2,700-3,600 feet has been the preferred choice of Christmas Tree growers for many years. It keeps its color well, is short needled, fairly fast growing and of bushy habit, much used for wind-breaks, shelter planting, landscaping; 86,000 seed per pound.** This strain is known under several names: Auvergne, French Blue, Haute Loire, Noble Race.

SCOTCH PINE—Vosges Mountains of North Eastern France. With supplies of certified origin being available from a closely defined forest area under extensive management we wish to offer this strain for trial. A hill strain from elevations 800-1,000 ft., growing on sandstone (silica) formations, receiving an annual precipitation of aboue 32 inches. A valuable feature, conducive to nursery handling, is the lateral development of its root system with no tap root to speak of. The tree is rather fast growing with straight stems and winter green foliage.

SCOTCH PINE—Seed from Spanish mountain sources. Because of good foliage color and excellent seed grade available, Christmas tree growers will want to try for their merits the three strains as offered on page 12.

SCOTCH PINE—Seed from Austrian Forests, a hill strain, elevation 1,400 feet, green needles, straight stems, small crowns, 78,500 seeds per pound. This strain ranks second in choice for Christmas tree production.

^{**}seed counts as given here are approximate, weather conditions causing variations from year to year.

SCOTCH PINE—Belgian Campine—we are again offering this lowland strain because of its excellent qualities as a forest tree. It is fast growing with straight stems, attaining largest average height and bole increment in comparison to other strains of Central Europe. While the foliage remains green in winter it is not favorably regarded by Christmas tree growers because of its long needles. Some, however, report that it responds well to shearing and like it for that reason. The tree does well on sand.

SCOTCH PINE—Seed from North German Low Plain. This strain has lately come to the attention of Christmas tree growers for its ability to do well on sand. Trees about twenty years old, on our own land, have shown only the slightest of foliage discoloration during the cold months in comparison to definite yellowing of Riga strain (Latvia) trees. Color, somewhat more intense than with the latter, is a bright-bluish green. Needles are from $2\frac{1}{2}-3$ inches long, a trifle wider and heavier in texture than those of the $2-2\frac{1}{4}$ inches long of the Riga strain. Seasonable increase is moderate, little in excess of Riga strain trees. We will supply certified seed from selected stands, collected under supervision of state foresters.

SCOTCH PINE—The West Baltic Strain from the East Coast of Sweden is somewhat different from the East Baltic or Riga strains which it surpasses in rate of annual increase. This is possibly the best strain for timber and planting in the North. 90,000 seeds per pound. Seedlings are unusually resistant to adverse conditions.

PINUS MUGO (MONTANA)—which is much planted on mountain slopes and steep banks to stop erosion, rock and snow slides, is of equal value for stopping wind erosion on dune lands in coastal districts. Closely planted it will form, in time, impenetrable thickets, a barrier to wind-blown sand, a refuge for wild life.

PINUS MUGO PUMILIO — Shrubby Swiss Pine as indicated by its form name Pumilio .ie. Dwarf, is the smallest of the Mountain Pines. Seed, certified as to origin, comes, we the assured, from pure stands at high altitude, 4,300–4,800 feet, without presence of trees of the Tree Swiss Pine (rostrata) to influence the dwarf habit by cross-pollination.

PSEUDOTSUGA TAXIFOLIA (douglasi) CAESIA — The Gray Douglas Fir is considered to be a form intermediate between the green Pacific Coast and the blue Rocky Mountain varieties which it surpasses in rate of seasonal increase. As an ornamental it is preferred to the Rocky Mountain type in sections where trees of the latter are affected with premature dying of lower branches. It is much used as a Christmas tree either cut from the wild or nursery grown. Originating in interior sections with drought conditions in summer and severe cold weather in winter it is entirely hardy in the north, reported thriving in cultivation in Finland. We take pride in the fact of having been the first seed-house in the states to list and describe this tree a good many years ago.

DORMANCY IN SEEDS OF PINE, SPRUCE, OTHER CONIFERS — Failure to germinate promptly certain conifer seeds is often due to the fact that no consideration had been given to dormancy factors. Seeds most usually concerned are:—White Spruce, White Pine, other Pines of the Cembra, Flexilis and Strobus groups.

In Fir (Abies), Hemlock (Tsuga), Douglas Fir (Pseudotsuga), Larch (Larix), Sitka Spruce dormancy occurrence is variable with dormancy found in some lots and none in others.

In Blue Spruce (Picea pungens) fifty percent of seed are dormant, the other half fast germinating.

Late spring planting of all of the before mentioned is apt to result in total failure or partial germination only. Fall planting of some, early spring planting for others or pre-treatment (stratification) of seed lots will be required for best results. Growers are requested:—

- A. To consult reference books for these problems.
- B. For earliest spring planting to prepare their beds in the fall, not to touch bed surface at sowing time but to dress with dry peatmoss, sow and cover with peatmoss and shades. Boarding-in of beds will facilitate this procedure.

RODENT REPELLENT — Seed destruction by foraging rodents and birds may be prevented by dusting seeds with Redlead powder. Seeds are being soaked over-night, superficially drained and the Redlead mixed in until all seeds are coated. A little goes a long way.

DAMPING OFF — Soil and seed treatment with commercially available weed-killers and fungicides is recommended. Bed preparation with humus materials and sand to insure a porous, moisture and air retaining surface is essential. Proper covering of seed will help much to alleviate damping-off conditions. It is advisable to cover seeds with a layer of dry soil, (just enough to cover seeds) taken from the walk between beds and applied with a sweeping motion from a, preferably rimless, square shovel. Over this a layer of sand, about ¼ inch thick, is applied. The light colored sand surface will reflect heat rays, act as a mulch and moisture retainer, prevent germination of weed seeds to a great extent.

CONDITIONS IN OUR FAVOR PERMIT US TO MAKE THE FOLLOWING CHANGES.

PA	GES	oz.	1/4 lb.	lb.
5	CORNUS fiorida, from Red Flowering Dogwood, clean		1.70	4.75
9	LARIX leptolepis		2,20	6.00
11	PICEA abies, Southeastern foothills of Alps Mts., Central Europe		1.85	5.50
	PICEA abies, Central European origins			3.25
	PICEA abies, domestic Lake States	1.35		8.50
	PICEA glauca, from planted stands near sea-level		1.10	3.00
12	PINUS resinosa, Lake States	1.75	4.50	12.00
	PINUS strobus, Lake States	.95	2.50	7.00
17	THUJA occidentalis pyramidalis, from own secimens	1.75	4.75	12,50
	TSUGA canadensis, Northern crop	1.75	4.50	12.00
19	APPLE, French Seed, Cidar Crab		.65	1.75
	APPLE, seed from East Central Europe		.80	2.25

BOOKS

General information as to how and when to plant, as often requested, cannot be given in letter form.

Purchase of suitable books along these lines, we believe, is the best initial investment a beginner can make toward success in his endeavor.

Books No. 12, 13 and 16 can be especially recommended.

- 1. THE AZALEA BOOK

 A complete authoritative handbook of Azalea culture—including tested methods of selection, plainting, and cultivation—azalea history—extensive descriptive lists of species and hybrid groups, of both deciduous and evergreens—recommended varieties for gardens.

 Fully illustrated in color and black and white \$8.95

 Books by Alfred C. Hottes—General information, propagation included, about Trees, Shrubs and Perennials.
- 2. THE BOOK OF TREES—448 pages—200 illustrations . . \$4.00
 3. BOOK OF SHRUBS—448 pages 191 illustrations . . \$4.00
- 4. BOOK OF PERENNIALS—280 pages—103 illustrations . . \$2.75
 5. CULTIVATED CONIFERS IN NORTH AMERICA
- 6. FLORIST CROP PRODUCTION AND MARKETING

 By KENNETH POST, PhD.

 The application of scientific facts to the production and marketing of florist cut-flowers, potted plants and bulbs grown in the greenhouse or in the field. 906 pages, profusely illustrated . \$10.00
- 8. HARDY RHODODENDRONS

 This delightful book written by an English nurseryman along practical lines traces the development of cultural varieties, gives all the information required for their successful culture from planting to propagating.

 \$3.75
- 9. HORTUS SECOND By L. H. and ETHEL ZOE BAILEY A concise dictionary of Gardening and General Horticulture. Apart from general information invaluable as a plant directory alone \$13.50
- 10. MANUAL OF CULTIVATED TREES AND SHRUBS

 By ALFRED REHDER

 The best reference book available giving detailed description of every hardy tree and shrub in cultivation. 966 pages . . \$12.50
- 11. MODERN ROSES V McFARLAND
 Compiled by J. Horace McFarland Co., and the American Rose
 Society. Rose Species described by Dr. George H. M. Lawrence
 of Bailey Hortorium, Cornell University.

BOOKS

Here is the latest edition of the rose directory consulted by rosarians for more than twenty years. The book is not limited to Modern roses in a strict sense, but also includes varieties that are of historical or botonical importance. Straightforward, non-technical descriptions of 7,652. Roses including 333 species. Here you will find:—

Description of the flower and plant, with correct name and all known synonyms, class to which each variety belongs, name of originator and introducer, with date of introduction.

Pronunciation of many variety names, to make every-day usage easier.

- 13. SEEDING AND PLANTING IN THE PRACTICE OF FORESTRY

 By J. W. TOUMEY and C. F. KORSTIAN
 A Manual for the guidance of forestry students, foresters, nurserymen, forest owners and farmers.
 507 pages, 2nd edition. The best book on the subject . . \$8.00
- 14. STANDARIZED PLANT NAMES

 New second edition. Reference book to 90,000 Common and Scientific names. \$10.50
- 15. WILD FLOWERS AND HOW TO GROW THEM
 by EDWIN F. STEFFEK
 100 Illustration D—50 in Full Color.

Described as the first and only practical book on the cultivation of wild flowers, with full information on where to find them, how to identify them positively, how to transplant and propagate. \$

16. "WOODY-PLANT SEED MANUAL" — with many illustrations and tables. The best new publication in a generation for those who are concerned with the intricate subject of knowledge and treatment of seeds of woody plants comes from the U. S. Department of Agriculture.

Prepared by the Forest Service—Miscellaneous Publication No. 654

Prepared by the Forest Service—Miscellaneous Publication No. 654, for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Please do not order from us. Same applies to the following.

17. PLANTING THE SOUTHERN PINES by PHILIP C. WAKELEY Agriculture Monograph No. 18. Forest Service, U. S. Department of Agriculture.

Book prices are postpaid in U.S.A. Terms net cash with order.

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